## AMENDMENTS TO THE CLAIMS:

This listing of claims will replace prior versions and listings of claims in the application:

## Listing of claims:

Claims 4, 8, 24 and 25 have been amended as follows: Underlines indicate insertions and strikeouts indicate deletions.

- (Withdrawn) An isolated mammalian staufen protein or C. elegans staufen 1. protein exhibiting homology to Drosophila staufen and interacting with dsRNA and/or RER.
- (Withdrawn) The isolated staufen protein of claim 1 having an amino acid sequence at least 95% identical to a sequence selected from the group consisting of:
  - (a) amino acids from about -81 to about 496 of Figure 1A;
  - (b) amino acids from about 1 to about 496 of Figure 1A;
  - (c) amino acids from about -80 to about 496 of Figure 1A;
  - (d) amino acids from about 2 to about 496 of Figure 1;
  - (e) amino acids from about 1 to about 494 of Figure 1C;
  - (f) amino acids from about 2 to about 494 of Figure 1C:
  - (g) amino acids of C. elegans of Figure 1'; and
  - (h) the amino acid sequence of an epitope-bearing portion of any one of the polypeptides of (a), (b), (c), (d), (e), (f) or (g).
- (Withdrawn) An amino acid sequence encoding at least one dsRNA binding domain of a mammalian staufen protein or C. elegans staufen protein.
- (Currently amended) An isolated nucleic acid molecule comprising a polynucleotide sequence at least 95% identical to a sequence selected from the group consisting of:

- (a) a polynucleotide sequence encoding a Staufen polypeptide comprising amino acids from 1 to 577 of SEQ ID NO:2;
- (b) a polynucleotide sequence encoding a Staufen polypeptide comprising the sequence of amino acids of SEQ ID NO:4;
- (c) a polynucleotide sequence encoding a Staufen polypeptide comprising amino acids from 2 to 577 of SEQ ID NO:2:
- (d) a polynucleotide sequence encoding a Staufen polypeptide comprising amino acids from 2 to 496 of SEQ ID NO:4;
- (e) a polynucleotide sequence encoding a Staufen polypeptide comprising the sequence of amino acids of SEQ ID NO:8;
- (f) a polynucleotide sequence encoding a Staufen polypeptide comprising amino acids from 2 to 487 of SEQ ID NO:8;
- (g) a nucleotide sequence encoding a Staufen polypeptide comprising the sequence of amino SEQ ID NO:10; (h) a polynucleotide sequence encoding a Staufon polypeptide comprising a nucleotide sequence fully complementary to any of the polynucleotide sequences encoding a Staufen polypeptide in (a), (b), (c), (d), (e), or (f); or (g); and
- (h) a polynucleotide sequence at least 95% identical to any of the polynucleotide sequences in (a), (b), (c), (d), (e), or (f), wherein said Staufen polypeptide interacts with at least one interacting partner selected from the group consisting of:
  - i. RNA:
  - ij. HIV genomic RNA; and
  - iii. tubulin;
- (i) a polynucleotide sequence which hybridizes under high stringency conditions to the sequence in (h) any of the polynucleotides sequences in (a), (b), (c), (d), (e), (f), or (h), wherein said nucleotide sequence encodes a Staufen polypeptide which interacts with at least one interacting partner selected from the group consisting of:
  - i. RNA:
  - ii. HIV genomic RNA; and
  - tubulin:

- and wherein said high stringengy conditions comprise hybridization for 6 to 16 hours at 65°C in 5X SSC, 5X denhardt's solution, 1% SDS, and 100 ug/ml denatured carrier DNA; and
- (j) a polynucleotide sequence which hybridizes under high stringency conditions to any of the polynucleotide sequences as set forth in SEQ ID NOs 1, 3, 5, 6 and 7; wherein said nucleic acid sequence does not hybridize to nucleotides 3073-3435 of SEQ ID NO:1, nucleotides 2784-3164 of SEQ ID NO:3, nucleotides 2709-3085 of SEQ ID NO:5, nucleotides 2914-3085 of SEQ ID NO:6, or nucleotides 2248-2270 of SEQ ID NO:7; and wherein said high stringengy conditions comprise hybridization for 6 to 16 hours at 65°C in 5X SSC, 5X denhardt's solution, 1% SDS, and 100 ug/ml denatured carrier DNA.
- (Original) A recombinant vector comprising said isolated nucleic acid molecule of claim 4.
- 6. (Original) A method of making a recombinant host cell comprising introducing the recombinant vector of claim 5 into a host cell.
- 7. (Original) A recombinant host cell produced by the method of claim 6.
- 8. (Currently amended) A recombinant method for producing a Staufen polypeptide, comprising culturing said host cell of claim 7 under conditions such that said polypeptide is expressed and recovering said Staufen polypeptide.
- 9. (Withdrawn) A method for treating an animal infected by a RNA virus, comprising administering thereinto a therapeutically effective amount of a staufen polypeptide, fragment or derivative thereof, and/or a nucleic acid molecule encoding same and/or staufen-activity modulator and/or antisense of staufen together with a pharmaceutically acceptable carrier.
- 10. (Withdrawn) The method of claim 9, wherein said RNA virus is a retrovirus.

- 11. (Withdrawn) The method of claim 10, wherein said retrovirus is HIV.
- 12. (Withdrawn) An antibody directed against staufen of mammalian or C. elegans origin.
- 13. (Withdrawn) A recombinant protein for targeting into a RNA virus, comprising an amino acid sequence portion encoding mammalian staufen or a part or derivative thereof.
- 14. (Withdrawn) The recombinant protein of claim 13, wherein said protein is a chimeric protein.
- 15. (Withdrawn) The protein of claim 13, wherein said RNA virus is HIV.
- 16. (Withdrawn) A composition for targeting into a RNA virus which comprises an effective amount of the recombinant protein of claim 13.
- 17. (Withdrawn) The protein of claim 14, comprising a portion having RNAse or protease activity
- 18. (Withdrawn) The protein according to claim 13, which prevents proper maturation of said RNA virus.

Claims 19-23; canceled.

- 24. (Currently amended) An isolated nucleic acid molecule, comprising a polynucleotide sequence which encodes a Staufen polypeptide sequence, said polynucleotide sequence being identical to a sequence selected from the group consisting of:
  - (a) SEQ ID NO:5;
  - (b) SEQ ID NO:3;

5149374382

- (c) SEQ ID NO:1;
- (d) SEQ ID NO:6;
- (e) SEQ ID NO:7;
- a polynucleotide sequence <u>fully</u> complementary to any of the nucleotide sequence encoding a Staufen polypeptide in (a), (b), (c), (d), or (e); and
- (g) a polynucleotide sequence at least 95% identical to any of the nucleotide sequences in (a), (b), (c), (d), or (e), wherein said Staufen polypeptide encoded by said polynucleotide sequence interacts with at least one interacting partner selected from the group consisting of:
  - i. RNA:
  - ii. HIV genomic RNA; and
  - iii. tubulin; and
- (h) a polynucleotide sequence which hybridizes under high stringency conditions to the coquence in (f) any of the polynucleotide sequences in (a). (b), (c), (d), (e), (f), or (g), wherein said Staufen polypeptide encoded by said polynucleotide sequence, interacts with at <u>least one</u> interacting partner selected from the group consisting of:
  - ì. RNA;
  - HIV genomic RNA; and ii.
  - tubulin;

and wherein said high stringengy conditions comprise hybridization for 6 to 16 hours at 65°C in 5X SSC, 5X denhardt's solution, 1% SDS, and 100 ug/ml denatured carrier DNA.

- 25. (Currently amended) An isolated nucleic acid molecule comprising a polynucleotide sequence selected from the group consisting of:
  - (a) a polynucleotide sequence encoding a Staufen polypeptide comprising the sequence of amino acids of SEQ ID NO:4;
  - (b) a polynucleotide sequence encoding a Staufen polypeptide comprising the sequence of amino acids of SEQ ID NO:2;
  - (c) a polynucleotide sequence encoding a Staufen polypeptide comprising amino acids 2 to 577 of SEQ ID NO:2; and

- (d) a polynucleotide sequence encoding a Staufen polypeptide and conservative substitutions of the polypeptides encoded by any of the sequences in (a), (b) or (c).
- 26. (Previously presented) A recombinant vector comprising said isolated nucleic acid molecule of claim 24.
- 27. (Previously presented) A method of making a recombinant host cell comprising introducing the recombinant vector of claim 26 into a host cell.
- 28. (Previously presented) A recombinant host cell produced by the method of claim 27.
- 29. (Previously presented) A recombinant method for producing a Staufen polypeptide, comprising culturing said host cell of claim 28 under conditions such that said polypeptide is expressed and recovering said Staufen polypeptide.
- 30. (New) An isolated nucleic acid molecule, comprising a polynucleotide sequence which encodes a Staufen polypeptide sequence, said polynucleotide sequence being selected from the group consisting of:
  - (a) SEQ ID NO:5;
  - (b) SEQ ID NO:3;
  - (c) SEQ ID NO:1;
  - (d) SEQ ID NO:6;
  - (e) SEQ ID NO:7; and
  - (f) a nucleotide sequence fully complementary to any of the nucleotide sequence encoding a Staufen polypeptide in (a), (b), (c), (d), or (e).
- 31. (New) The isolated nucleic acid molecule of claim 30, wherein said polynucleotide sequence is selected from the group consisting of

- (a) a polynucleotide sequence encoding a Staufen polypeptide comprising amino acids from 1 to 577 of SEQ ID NO:2;
- (b) a polynucleotide sequence encoding a Staufen polypeptide comprising the sequence of amino acids of SEQ ID NO:4;
- (c) a polynucleotide sequence encoding a Staufen polypeptide comprising amino acids from 2 to 577 of SEQ ID NO:2;
- (d) a polynucleotide sequence encoding a Staufen polypeptide comprising amino acids from 2 to 496 of SEQ ID NO:4;
- (e) a polynucleotide sequence encoding a Staufen polypeptide comprising the sequence of amino acids of SEQ ID NO:8;
- (f) a polynucleotide sequence encoding a Staufen polypeptide comprising amino acids from 2 to 487 of SEQ ID NO:4;
- (g) a polynucleotide sequence fully complementary to any of the polynucleotide sequence encoding a Staufen polypeptide in (a), (b), (c), (d), (e), or (f).
- 32. (New) A recombinant vector comprising said isolated nucleic acid molecule of claim 31.
- 33. (New) A method of making a recombinant host cell comprising introducing the recombinant vector of claim 32 into a host cell.
- 34. (New) A recombinant host cell produced by the method of claim 33.
- 35. (New) A recombinant method for producing a Staufen polypeptide, comprising culturing said host cell of claim 34 under conditions such that said polypeptide is expressed and recovering said Staufen polypeptide.
- 36. (New) A recombinant vector comprising said isolated nucleic acid molecule of claim 30.
- 37. (New) A method of making a recombinant host cell comprising introducing the recombinant vector of claim 36 into a host cell.

- 38. (New) A recombinant host cell produced by the method of claim 37.
- 39. (New) A recombinant method for producing a Staufen polypeptide, comprising culturing said host cell of claim 38 under conditions such that said polypeptide is expressed and recovering said Staufen polypeptide.